west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

March 06, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-10900208, issued to CABOT OIL & GAS CORPORATION, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: 1251
Farm Name: BROWN, J. K.
API Well Number: 47-10900208
Permit Type: Plugging
Date Issued: 03/06/2015

Promoting a healthy environment.

1 09 00208P

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

WW-4B
Rev. 2/01

1) Date January 21, 2015
2) Operator's
Well No. J.K. Brown #1
3) API Well No. 47- 109 - 00208 P

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ____/ Gas X / Liquid injection ____/ Waste disposal ____/
(If "Gas, Production X or Underground storage ____) Deep ____/ Shallow X

5) Location: Elevation 1,293.13' Watershed Clear Fork of the Guyandotte River
District Oceana County Wyoming Quadrangle Matheny

6) Well Operator Cabot Oil & Gas Corporation
Address Five Penn Center West, Ste. 401
Pittsburgh, PA 15276

7) Designated Agent Whitney Johnson
Address P.O. Box 450
Glasgow, WV 25086

8) Oil and Gas Inspector to be notified
Name Danny Mullins
Address 124 Big Trace Fork Rd.
Harts, WV 25524

9) Plugging Contractor
Name Contractor Services, Inc.
Address 929 Charleston Road
Spencer, WV 25276

10) Work Order: The work order for the manner of plugging this well is as follows:

See Attached Sheet

Received
Office of Oil & Gas
JAN 27 2015

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

OK gwm

Work order approved by inspector _____ Date _____

10900208P

J. K. Brown #1
API # 47 - 109 - 00208
PLUGGING PROCEDURE

Current Configuration
Elevation – 1290'
TD @ 3276'
16" conductor @ 16'
13-3/8" casing @ 114'
10-3/4" – 32.75# casing @ 260' on shoe
8-5/8" – 24# casing @ 1260' on packer
7" – 23# casing @ 2347' – shot off @ 2112' & pulled
No coal reported
Water @ 40', 135', & 352'
Gas shows @ 450' & 907'
Berea Grit @ 3200' – 3226' with no show
Big Lime @ 2300' – 2622' with gas show @ 2337' & 2549'
Maxton @ 2050' – 2100' w/ gas show @ 2076'
Ravencliff @ 1736' – 1786' w/ no show

PROCEDURE

1. Contact Pineville Office a minimum of 48 hours prior to starting work.
2. Contact State Inspector a minimum of 24 hours prior to starting work.
3. MIRU service rig and blow down well.
4. Lay 2" line from wellhead to pit/tank and stake down securely.
5. MIRU service rig and blow down well. Have vacuum truck available to catch any fluids circulated from well.
6. Unpack wellhead.
7. Unseat packer and pull 2-3/8" tubing.
8. TIH with 2-3/8" work string to 2090'.
9. MIRU Cementing Company.
10. Pump 50 bbls 6% gel followed by 60 sks of Class A cement for plug 1 from 2090' to 1900'.
11. Displace w/ 7 ¼ bbls of 6% Gel.
12. TOOH with work string. Let cement plug set for a minimum of eight hours.
13. ATTEMPT TO PULL 8 5/8" CASING THAT IS IN PACKER.
14. IF UNABLE TO PULL 8 5/8" FREEPOINT, CUT ABOVE FREEPOINT AND POOH.
15. TIH W/ 2 3/8" WORK STRING TO 1300' (CUT)
16. Pump 50 bbls 6% gel followed by 50 sks of Class A cement for cement plug 2 from 1300' to 1200'. CEMENT MUST COVER 8 5/8" CASING CUT.
17. Displace w/ 4 ½ bbls of 6% Gel.
18. Pull work string up to 950'.
19. Pump 50 sks of Class A cement for cement plug 3 from 950' to 850'.
20. Displace w/ 3 ¼ bbls of 6% Gel.
21. Pull work string up to 500'.
22. Pump 20 bbls 6% gel followed by 95 sks of Class A cement for cement plug 4 from 500' to 300'.
23. Displace w/ 1 bbl of 6% Gel.
24. TOOH with work string.
25. Pull 10-3/4", 13-3/8" & 16" casing strings. If unable to pull, run freepoint on casing strings, cut casing above freepoint, and POOH with casing.
26. TIH w/ work string to 250' and pump 250 sks of Class A cement for plug 5 from 250' to surface.
27. TOOH with work string and lay down.

JWM

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JAN 27 2015

109 00208P

28. RDMO Cementing Company.
29. Place monument as required by law on top of well bore.
30. Reclaim well site.

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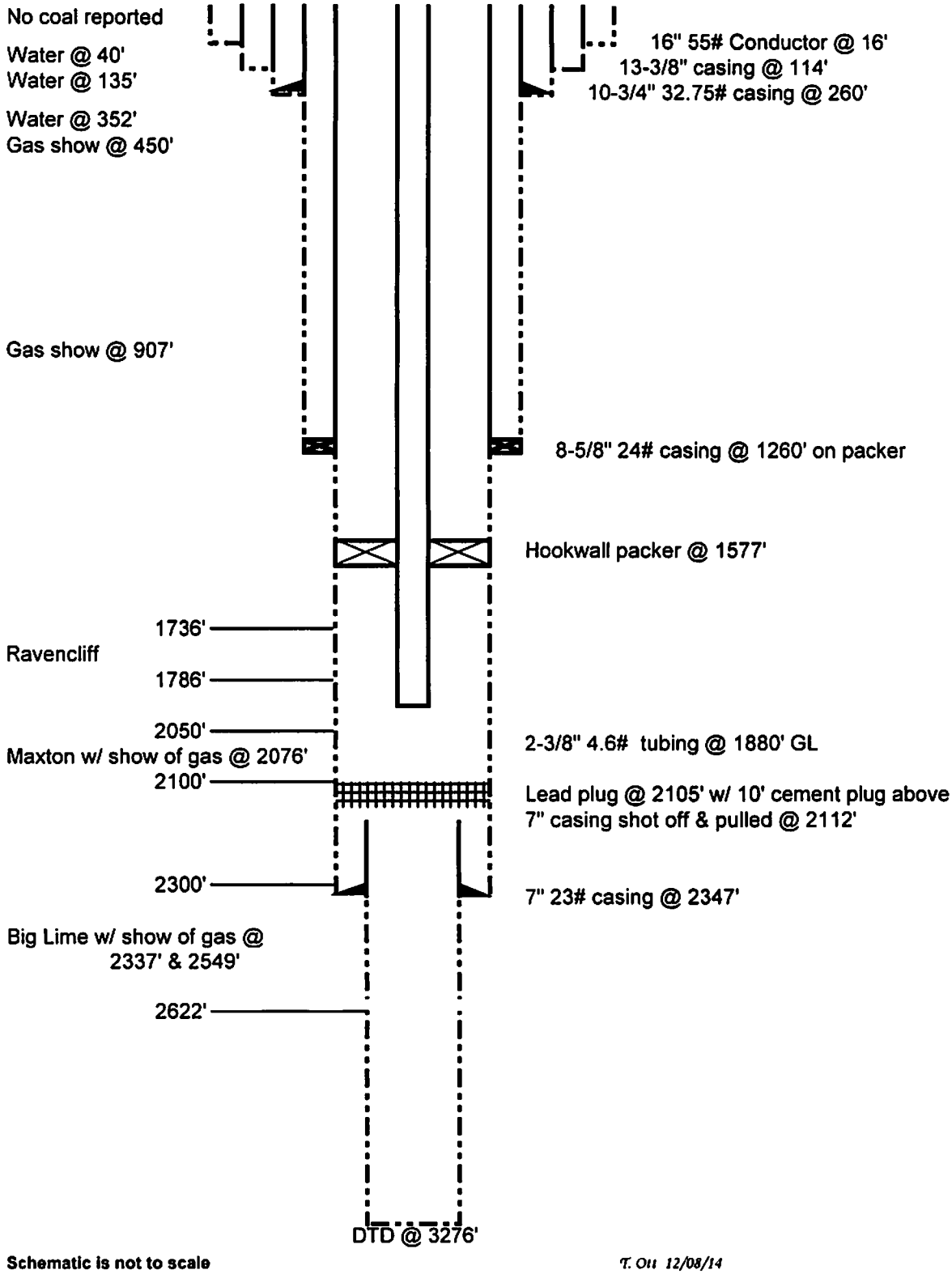
Office of Oil & Gas
JAN 27 2015

109 00208P

J. K. Brown #1

API 47-109-00208

CURRENT CONFIGURATION



Schematic is not to scale

T. Ott 12/08/14

Received
Office of Oil & Gas
JAN 27 2015

10900208P

WW-4A
Revised 6-07

1) Date: January 21, 2015
2) Operator's Well Number
J.K. Brown #1

3) API Well No.: 47 - 109 - 00208

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name Thomas H. Evans, Jr.
Address P.O. Box 32
Oceana, WV 24870
(b) Name
Address
(c) Name
Address

5) (a) Coal Operator
Name None
Address
(b) Coal Owner(s) with Declaration
Name Thomas H. Evans, Jr.
Address P.O. Box 32
Oceana, WV 24870
Name
Address
(c) Coal Lessee with Declaration
Name None of Record
Address

6) Inspector Danny Mullins
Address 124 Big Trace Fork Road
Harts, WV 25524
Telephone (304) 932-6844

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

(1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
(2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator Cabot Oil & Gas Corporation
By: Kenneth L. Marcum
Its: Regulatory Supervisor
Address Five Penn Center West, Suite 401
Pittsburgh, PA 15276
Telephone (412) 249-3850

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Constance C. Carden, Notary Public
McDonald Boro, Washington County
My Commission Expires Nov. 16, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Subscribed and sworn before me this 21st day of January, 2015
Constance C. Carden Notary Public
My Commission Expires November 16, 2017

Received
Office of Oil & Gas
JAN 27 2015

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.

109 00208 P

7014 2120 0003 6926 5866

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Sent To
Street & Apt. or PO Box
City, State,

Thomas H. Evans, Jr.
P.O. Box 32
Oceana, WV 24870

J.K.Brown #1 P&A

PS Form 3 ... ions

7014 2120 0003 6926 5873

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JAN 27 2015
CARNEGIE PA 15106
USPS

Sent To
Street & Apt. or PO Box
City, State,

Danny Mullins
124 Big Trace Fork Road
Harts, WV 25524

J.K.Brown #1 P&A

PS Form ... structions

Received
Office of Oil & Gas
JAN 27 2015

1090020 8P

WW-9
Rev. 5/10

Page 1 of
API Number 47 - 109 - 00208
Operator's Well No.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name **Cabot Oil & Gas Corporation** OP Code

Watershed **Clear Fork of the Guyandotte River** Quadrangle **Matheny**

Elevation **1,293'** County **Wyoming** District **Oceana**

Description of anticipated Pit Waste: **None - no cuttings produced during plugging operation**

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ____ No ____

Will a synthetic liner be used in the pit? **N/A**. If so, what mil.?

Proposed Disposal Method For Treated Pit Wastes: ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS

- ____ Land Application
- ____ Underground Injection (UIC Permit Number)
- ____ Reuse (at API Number)
- ____ Off Site Disposal (Supply form WW-9 for disposal location)
- ____ Other (Explain

Drilling medium anticipated for this well? Air, freshwater, oil based, etc.
-If oil based, what type? Synthetic, petroleum, etc.
Additives to be used?
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. **No cuttings produced during plugging operation**
-If left in pit and plan to solidify what medium will be used? Cement, lime, sawdust
-Landfill or offsite name/permit number?

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature Kenneth L Marcum

Company Official (Typed Name) **Kenneth L. Marcum**

Company Official Title **Regulatory Supervisor**

Received
Office of Oil & Gas
JAN 27 2015

Subscribed and sworn before me this 21st day of January, 20 ~~14~~ 15

Constance C. Carden Notary Public

My commission expires November 16, 2017

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Constance C. Carden, Notary Public
McDonald Boro, Washington County
My Commission Expires Nov. 16, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

109002081P

Form WW-9

Operator's Well No._____

LEGEND

Property Boundary
Road
Existing Fence
Planned Fence
Stream
Open Ditch
Rock
North N
Buildings
Water wells W
Drill site
Diversion
Spring
Wet Spot
Drain Pipe with size in inches (12)
Waterway
Cross Drain
Artificial Filter Strip
Pit: cut walls
Pit: compacted fill walls
Area for Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed 1.0 Prevegetation pH 6.5

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)

Mulch Pulp Fiber at 1000 to 1500 Tons/acre

Seed Mixtures

Area I Seed Type	lbs/acre			Area II Seed Type	lbs/acre		
Grain Rye -	100	Red Clover - 5	Fescue - 40	Grain Rye -	100	Red Clover - 5	Fescue - 40
Annual Rye -	20	White Clover - 5		Annual Rye -	20	White Clover - 5	
Perennial Rye -	10	Alta Sweet Clover - 5		Perennial Rye -	1	Alta Sweet Clover - 5	
Yellow Clover -	5	Birdsfoot Trefoil - 10		Yellow Clover -	5	Birdsfool Trefooil - 10	

Attach:
Drawing(s) of road, location,pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:_____

Comments: _____

Title:_____ Date:_____

Field Reviewed? (_____) Yes (_____) No

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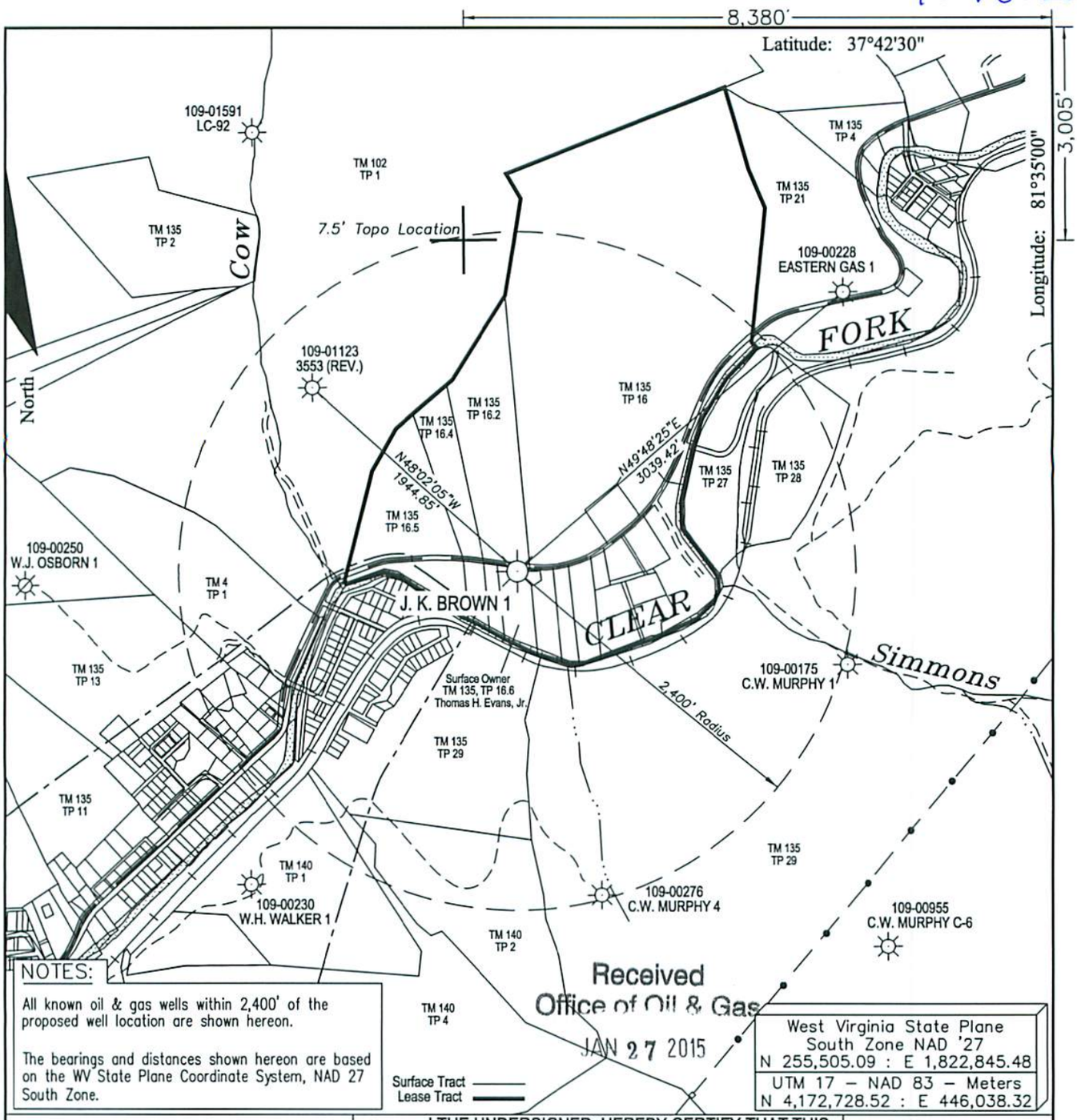
JAN 27 2015

109 00208P



NOTES:

All known oil & gas wells within 2,400' of the proposed well location are shown hereon.

The bearings and distances shown hereon are based on the WV State Plane Coordinate System, NAD 27 South Zone.

Received
Office of Oil & Gas
JAN 27 2015

West Virginia State Plane
South Zone NAD '27
N 255,505.09 : E 1,822,845.48
UTM 17 – NAD 83 – Meters
N 4,172,728.52 : E 446,038.32

FILE #:

DRAWING #: Brown 1 ww6

SCALE: 1" = 1000'

MINIMUM DEGREE OF ACCURACY: 1 : 12,729

PROVEN SOURCE OF ELEVATION: Global Positioning System (GPS)

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIROMENTAL PROTECTION.

Signed:

R.P.E.: L.L.S.: 1993

GREGORY A. PERKINS
LICENSED
No. 1993
STATE OF WEST VIRGINIA
PROFESSIONAL SURVEYOR

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

DATE: December 11, 2014

OPERATOR'S WELL #: J. K. Brown 1

API WELL #: 47 (STATE) 109 (COUNTY) 00208 P (PERMIT)

Well Type: ☐ Oil ☐ Waste Disposal ☐ Production ☐ Deep
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: Clear Fork of the Guyandotte River ELEVATION: 1,293.13'

COUNTY/DISTRICT: Wyoming / Oceana QUADRANGLE: Matheny

SURFACE OWNER: Thomas H. Evans, Jr. ACREAGE: 2.25

OIL & GAS ROYALTY OWNER: Thomas H. Evans, Jr. ACREAGE: 2.25

LEASE #: 47-0464 DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☐

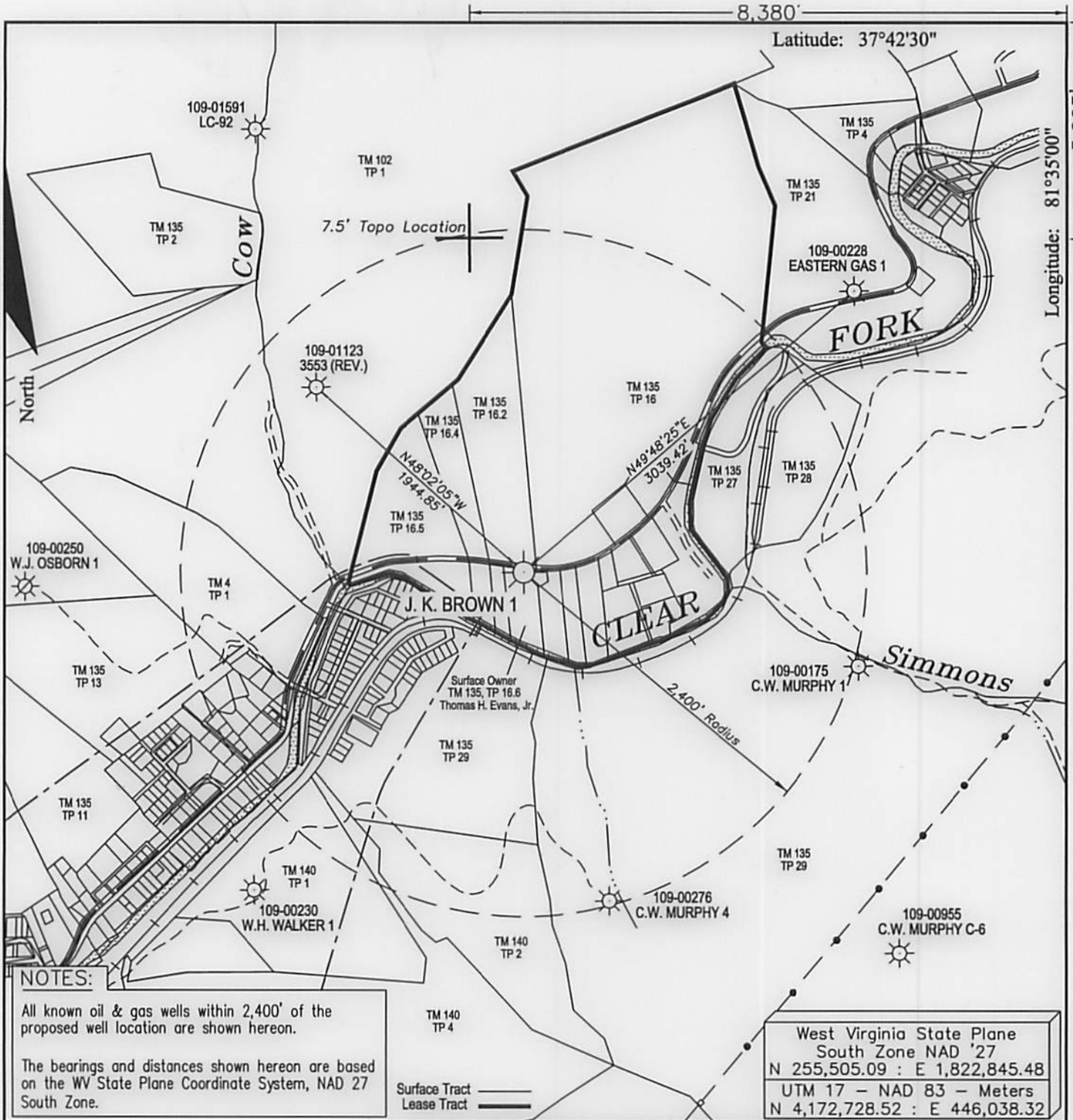
PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☒

CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):

TARGET FORMATION: ESTIMATED DEPTH:

WELL OPERATOR Cabot Oil & Gas Corp.
Address Five Penn Center West, Suite 401
City Pittsburgh State PA Zip Code 15276

DESIGNATED AGENT Whitney Johnson
Address P.O. Box 450
City Glasgow State WV Zip Code 25086



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PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☒

CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):

TARGET FORMATION: ESTIMATED DEPTH:

WELL OPERATOR Cabot Oil & Gas Corp.
Address Five Penn Center West, Suite 401
City Pittsburgh State PA Zip Code 15276

DESIGNATED AGENT Whitney Johnson
Address P.O. Box 450
City Glasgow State WV Zip Code 25086

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LICENSED
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STATE | COUNTY | PERMIT

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☐ PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☒

☐ CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):

TARGET FORMATION: ESTIMATED DEPTH:

WELL OPERATOR Cabot Oil & Gas Corp. DESIGNATED AGENT Whitney Johnson

Address Five Penn Center West, Suite 401 Address P.O. Box 450

City Pittsburgh State PA Zip Code 15276 City Clarksburg State WV Zip Code 25086

109 00208P

Note:
Tanks will be used instead of drilling pit(s), and may be adjusted to the most environmental safe site to meet the requirements of the WVDEP.

TM 135
TP 16.5

TM 135
TP 16.4

TM 135
TP 16.2

TM 135
TP 16

J. K. BROWN 1
API 109-00208

APPLY CULVERTS
AS NEEDED

EXISTING ROAD
-4% TO -7%
165'±

85

85

CUT

FILL

TM 135
TP 16.3

Surface Owner
TM 135, TP 16.6
Thomas H. Evans, Jr.

Surface Owner
TM 135, TP 16.17
Thomas H. Evans, III, ET UX

TM 135
TP 16.16

TM 135
TP 16.17

CLEAR

FORK

Received
Office of Oil & Gas
JAN 27 2015

DRAWING LEGEND

PROPOSED ROAD		ROAD DITCH	
EXISTING ROAD		GAS LINE	
STRAW BALES		FENCE LINE	
SILT FENCE		ROCK OUTCROP	
BRUSH BARRIER		WATER WELL	
TREE LINE		HOUSE/STRUCTURE	
ROCK RIP RAP		UTILITY POLE	
CROSS DRAIN		SPRING	
CULVERT		WET SPOT	
DRILLING PIT		PIT WASTE APP. AREA	

0 100' 200' 400'
GRAPHIC SCALE

Cabot Oil & Gas Corporation

J. K. BROWN 1

CONSTRUCTION & RECLAMATION SITE PLAN

SITUATED ON THE WATERS OF CLEAR FORK OF THE GUYANDOTTE RIVER
OCEANA DISTRICT, WYOMING COUNTY, W.VA
MATHENY QUADRANGLE

SHEET NUMBER	SCALE:	DRAWN BY:	DATE:	CHK'D. BY:
1 OF 1	1"=200'	G. PERKINS	12-10-14	DKC

10900208P

GENERAL NOTES:

THIS DRAWING REPRESENTS A SCHEMATIC REPRESENTATION OF THE PROPOSED WELL SITE AND ACCESS ROAD. PROPOSED STRUCTURES SUCH AS THE DRILLING PIT, ROADWAY, CULVERTS, SEDIMENT BARRIERS, ETC. ARE SHOWN IN THEIR APPROXIMATE PREPLANNING CONFIGURATION. GIVEN UNFORESEEN CIRCUMSTANCES, THE AS-BUILT LOCATION OF THESE STRUCTURES MAY VARY SLIGHTLY FROM THE LOCATION SHOWN ON THE ATTACHED DRAWINGS.

ALL ROADS SHOWN THEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH GUIDELINES AND REQUIREMENTS OF WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL MANUAL.

ALL CULVERTS SHOWN ON THIS DRAWING ARE PROPOSED AND WILL BE A MINIMUM OF 15" IN DIAMETER UNLESS OTHERWISE NOTED.

DITCH LINES AND CULVERTS WILL BE INSTALLED WHENEVER PRACTICAL. HOWEVER PORTIONS OF THE EXISTING/ PROPOSED ROADS WHICH ARE LOCATED IN SOLID ROCK SHALL NOT REQUIRE DITCHES OR CROSS DRAINS, UNLESS OTHERWISE WARRANTED BY FIELD CIRCUMSTANCES.

SUPPLEMENTAL DRAINAGE AND/OR SEDIMENT CONTROL STRUCTURES MEASURES IN ADDITION TO THOSE SHOWN ON THE ATTACHED DRAWINGS WILL BE INSTALLED WHEN AND WHERE DEEMED NECESSARY. SUCH ADDITIONAL MEASURES MAY CONSIST OF EITHER STRAW BALES, SILT FENCES OR OTHER MEASURES OUTLINED IN THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL.

SEDIMENT BASINS (TRAPS) WILL BE CONSTRUCTED AT ALL CULVERTS AND CROSS DRAINS INLETS AS REQUIRED IN THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL MANUAL. FIELD CONDITIONS SUCH AS ROCK OUTCROPS AND BEDROCK MAY PROHIBIT INLET TRAPS BEING INSTALLED WHEN THESE CONDITIONS EXIST. ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

A SEDIMENT BARRIERS OF EITHER BRUSH, STRAW BALES, FILTER FENCE, ETC. WILL BE INSTALLED AND MAINTAINED BELOW THE OUT FALL OF ALL PROPOSED CULVERTS AND AT ALL OTHER STORM WATER DRAINAGE POINTS FROM EITHER THE ROADWAY OR THE LOCATION.

ALL NECESSARY TIMBER OR BRUSH WILL BE REMOVED FROM ROUTE OF THE ROADWAY AND LOCATION BY CLEANING AND GRUBBING ACTIVITIES. ANY SALVAGEABLE TIMBER WILL BE CUT AND STACKED TO THE SIDE OF THE ROADWAY OR REMOVED TO A STOCKPILE AREA. THE REMAINING TIMBER OR BRUSH WILL BE CUTUP AND WIND ROWED BELOW THE OUTSLOPE OF THE CONSTRUCTION AREAS TO BE UTILIZED AS A SEDIMENT BARRIER.

SEPARATE PERMITS WILL BE OBTAINED FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION FOR ALL POINTS OF INGRESS AND EGRESS FROM COUNTY AND STATE ROADS. THESE INGRESS AND EGRESS POINTS WILL BE MAINTAINED IN ACCORDANCE WITH CURRENT WEST VIRGINIA DEPARTMENT OF TRANSPORTATION REGULATIONS. A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 8" OF CRUSHED STONE WILL BE CONSTRUCTED FOR A MINIMUM DISTANCE OF 50' FROM THE INGRESS AND EGRESS POINTS OF ALL PUBLIC ROADWAYS IN ACCORDANCE WITH CURRENT WEST VIRGINIA DEPARTMENT OF TRANSPORTATION REGULATIONS.

ALL CULVERTS SHOWN ON THE ATTACHED DRAWINGS ARE TO BE CONSIDERED PERMANENT AND WILL REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION ACTIVITIES UNLESS NOTED OTHERWISE. A STABILIZED OUTLET CONTROL DEVICE SUCH AS RIP RAP, NATURAL STONE, BRUSH, ETC. WILL BE INSTALLED BELOW THE OUT FALL OF ANY ROADWAY CULVERT(S) WHICH ARE NOT LOCATED IN A STREAM OR CREEK.

PERMANENT CROSS DRAINS OR WATER BARS WILL BE INSTALLED AS AN INTEGRAL PART OF THE RECLAMATION PROCESS AND SHALL BE SPACED IN ACCORDANCE WITH AS-BUILT ROADWAY SLOPES AND TABLE 11-4 OF THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL.

TEMPORARY SEEDING AND MULCHING WILL BE UTILIZED TO PROVIDE A VEGETATIVE COVER ON ALL DISTURBED AREAS I.E. ROADWAYS, LOCATION, ROAD/LOCATION SLOPES AND ANY OTHER AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES.

THE LOCATION OF DRILLING PIT(S) MAY BE ADJUSTED TO THE MOST ENVIRONMENTAL SAFE SITE TO MEET THE REQUIREMENTS OF THE WVDEP.

CONTRACTORS NOTE:

IT IS THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION AND CONDITION OF ALL UNDERGROUND UTILITIES, SANITARY SEWERS, STORM SEWERS, ETC. PRIOR TO THE COMMENCEMENT OF ANY/OR CONSTRUCTION ACTIVITIES. DIG WITH C.A.R.E. CALL MISS UTILITY 1-800-245-4848.

TABLE 11-4 SPACING OF CROSS DRAINS	
ROAD GRADE (%)	DISTANCE (FT)
1	400
2	250
5	135
10	80
15	60
20	45

TABLE 11-7 SPACING OF CULVERTS	
ROAD GRADE (%)	DISTANCE (FT)
2-5	500-300
6-10	300-200
11-15	200-100
16-20	100

DIG WITH C.A.R.E. CALL MISS UTILITY KEEP WEST VIRGINIA SAFE

1-800-245-4848

DRAWING LEGEND

PROPOSED ROAD
EXISTING ROAD
STRAW BALES
SILT FENCE
BRUSH BARRIER
TREE LINE
ROCK RIP RAP
CROSS DRAIN
CULVERT
DRILLING PIT
ROAD DITCH
GAS LINE
FENCE LINE
ROCK OUTCROP
WATER WELL
HOUSE/STRUCTURE
UTILITY POLE
SPRING
WET SPOT
PIT WASTE APP. AREA

DRIVING DIRECTIONS FOR J. K. BROWN 1

1.) FROM PINEVILLE, WV, DRIVE NORTH ON STATE ROUTE 10 FOR 12.3 MILES± TO INTERSECTION OF STATE ROUTES 10 AND 85 IN OCEANA, WV.
2.) TURN RIGHT AND CONTINUE NORTH ON STATE ROUTE 85 FOR 1.0 MILE± TO THE BEGINNING OF THE EXISTING ACCESS ROAD LOCATED ON THE RIGHT-HAND SIDE OF THE ROAD.
3.) FROM THE AFOREMENTIONED SITE, FOLLOW THE EXISTING ROAD FOR APPROXIMATELY 185 FEET± TO THE EXISTING WELL AS SHOWN ON THE "CONSTRUCTION AND RECLAMATION PLAN".

Received
Office of Oil & Gas
JAN 27 2015

Cabot Oil & Gas Corporation

J. K. BROWN 1
OCEANA DISTRICT, WYOMING COUNTY, W.VA
MATHENY 7.5' QUADRANGLE

10900208P

Cabot Oil & Gas Corporation
North Region

January 21, 2015

Chief
West Virginia Division of Environmental Protection
Office of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: J.K. Brown #1
Oceana District, Wyoming County, WV
API # 47-109-00208
Written Application to plug and abandon wellbore

Dear Chief:

In accordance with Article 22-6-23 of the Code of State Regulations regarding oil and gas operations, please find attached a formal application for the plug and abandonment of the subject well.

Notices of our intention to plug this wellbore have been sent to surface owner, coal owner, and coal operators associated with this well. Copies of the certified mail receipts are attached for your records.

If you have any questions or need additional information, I can be reached at 412-249-3850.

Sincerely,

Kenneth L. Marcum
Regulatory Supervisor

Received
Office of Oil & Gas
JAN 27 2015